1 BEFORE THE POLLUTION CONTROL HEARINGS BOARD 2 STATE OF WASHINGTON 3 IN THE MATTER OF CITY OF LYNNWOOD, 4 PCHB No. 84-206 Appellant, 5 PINAL FINDINGS OF FACT, ٧. CONCLUSIONS OF LAW AND 6 ORDER STATE OF WASHINGTON, 7 DEPARTMENT OF ECOLOGY, Respondent. 9

This matter, the appeal of the Department of Ecology's refusal to concur in the City of Lynnwood's application for a waiver from the requirement to achieve effluent limitations based upon secondary treatment at its municipal sewage treatment plant, came on for hearing in Lynnwood, Washington, on April 8 and 9, 1985. Sitting as the Board were Lawrence J. Faulk (presiding), Gayle Rothrock, and Wick Dufford.

Appellant City of Lynnwood was represented by Patrick M. Curran, City Attorney. Respondent Department of Ecology was represented by Leslie Nellermoe, Assistant Attorney General.

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 Post-hearing briefs and argument were submitted, the final such being received by the Board on July 9, 1985.

In the evidentiary hearing, witnesses wre sworn and testified.

Exhibits were admitted and examined. From the testimony heard and exhibits examined, the Board makes these

# FINDINGS OF FACT

I

Appellant City of Lynnwood (the City) is a municipal corporation which owns and operates a sewage treatment plant on 2.7 acres of land which discharges to Brown's Bay on Puget Sound in the State of Washington. The plant currently provides only primary treatment.

ΙI

Respondent Department of Ecology (DOE) is an agency of the State of Washington, with responsibilities for administering the laws of the state concerning water pollution prevention and control.

III

This case presents a very basic conflict: whether the treatment of municipal sewage should be upgraded to secondary treatment, which is technologically feasible, or whether enhanced primary treatment is adequate if no known harm is being done to the biology and uses of the receiving waters, and the quality of the receiving water is high.

The question is pre-eminently an issue of policy. The task of this Board is to determine what the policy of the State of Washington is on this matter as expressed through existing state law.

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Simply put, the DOE wants Lynnwood to upgrade its sewage treatment plant to secondary treatment. The City does not want to do it. the heart of the dispute is the problem of cost.

IV

The history of efforts to combat water pollution in this country reflects this same clash between two theories of regulation: management based on receiving water quality and control of effluent at the point of discharge.

The effluent control approach is premised on the understanding that, most often, the pollutant removal achieved by one or more individual dischargers will result in water quality which is better than the limits described by water quality standards. In such a situation, there is room for new dischargers to use the same receiving medium without the occurrence of pollution, as presently defined. Moreover, assuming that knowledge of the effects of adding society's wastes to water is now imperfect, technology-based limits on effluent provide a hedge against unknown long-term adverse consequences of discharges which are not accounted for in present water quality standards.

V

On October 18, 1972, Congress overrode a presidential veto to enact Public Law 92-500, a comprehensive national program centered on technology-based effluent control concept, to be system of federal permits, principally, through a entitled the National Pollutant Discharge Elimination System (NPDES).

The Act provided for state administration of the federal permit program where the laws and administrative resources of the state were found adequate to the task. The State of Washington, through DOE, qualified for and undertook this function, merging the NPDES permit system with a pre-existing system of waste discharge permits under state law alone.

# VI

The Federal Water Pollution Control Act amendments of 1972 required the achievement of effluent limitations based upon secondary treatment for publicly owned treatment works. At that time most municipalities were discharging wastes receiving primary treatment or less.

# VII

The instant controversy is the outgrowth of a 1977 amendment to the Federal law (now called the Clean Water Act) which revived the old management by water quality approach for certain publicly owned treatment works. This marked a significant federal departure from the effluent control philosophy adopted in 1972 (and still in effect for most municipalities and for industrial sources). In fact, the federal goal enacted in 1972 (and still on the books) was the total elimination of all pollutant discharges to navigable waters in the nation by 1985.

The 1977 amendments to the Federal Act, included a new provision, Section 301(h), which provided for waivers of the secondary treatment requirement for qualifying municipalities discharging to marine

waters. The "marine waiver" was to take the form of an NPDES permit issued directly by the United States Environmental Protection Agency (EPA). Issuance would depend on meeting numerous statutory tests, including criteria related to the quality of the receiving waters.

#### VIII

Section 301(h) allows EPA-issued waivers, with the concurrence of the state in which the discharge occurs. The federal law provided no standards for such concurrence, but EPA by rule provided that:

No section 301(h) modified permit shall be issued:...

(3) where such issuance would conflict with applicable provisions of State, local or other Federal laws or Executive Orders . . .

# 42 CFR 125.59(b)(3)

EPA, further, made the states themselves the judges of when issuance of a "marine waiver" would conflict with the state law. Under 42 CFR 125.60(b)(2), each applicant must provide a "determination," signed by the appropriate state agency, that the proposed modified discharge will comply with applicable provisions of state law. If the state does not provide such a "determination," the federal waiver process ceases. 40 CFR 125.59(e)(3).

ΙX

While establishing new substantive requirements, the 1972 Federal Act also brought into being a massive program of grants for the construction of municipal treatment works. In the following ten years publicly owned treatment plants across the nation were upgraded with federal grants furnishing 75 percent of the cost. In this state,

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additional grant funds from state sources contributed 15 percent of project costs, leaving only 10 percent to be funded from local sources in the typical case.

Х

In recent years the fountain of federal and state grant funds has all but dried up. Now only a few projects each year can expect to receive funds from either source. Municipalities are now asked to plan for sewage treatment plant improvements on the basis that the full cost will have to be born locally.

XI

Under the Federal Act, municipalities which do not qualify for a must still proceed to secondary treatment. deadline of mid-1977 was first allowed to be extended to mid-1983, and then, allowed to be extended again to mid-1988. Extensions can be given if federal grant money was not made available in time to meet the initial deadline. However, this linkage of treatment upgrade requirements and the availability of grant funds under federal law applies only to the timing by which secondary treatment must The substantive obligation to achieve this of treatment remains whether grant monies are ever received or not.

XII

In April 1977, the City and Alderwood Water District engaged an engineering firm to prepare a facility plan for upgrading the sewer system and treatment plant serving Lynnwood and environs. The majority of the existing primary system has been in operation since

1963.

The facility plan was described as "the first step in a three-step process required to complete wastewater treatment works with 75% federal grant . . and a 15% matching grant from the state of Washington . . The second step was to be preparation of detailed design plans and specifications, and the final step was to be construction of the facilities.

# XIII

The "Area Wide 201 facilities plan," published in September, 1977, provided background information about population and land use, examined applicable governmental regulations, analyzed present and future wastewater characteristics, evaluated alternative treatment processes and recommended a treatment system which would meet the secondary treatment requirements and serve projected growth for twenty years. The proposed improvements were planned to be operational in 1980, subject to revision depending on the availability of government grants.

The plan recommended a secondary treatment process utilizing the activated bio-filtration (ABF) process.

# XIV

The facility plan also provided a financial plan showing estimated project costs for a secondary treatment plant designed to handle 5.5 million gallons per day (MGD) on the average. Total costs, including construction costs plus 5.4 percent for sales tax and 10 percent for engineering, legal and administrative fees for the recommended

treatment facilities in 1977 dollars were estimated at \$11,783,570. Of this, \$10,605,213 was anticipated to be paid by federal and state grants. This left a total local capital cost to be born by the City of \$1,178,357. These figures were preliminary planning estimates, not based on detailed engineering or design work and, therefore, subject to a lesser degree of accuracy.

The plan, additionally, projected the total estimated annual operation and maintenance cost. From these analyses, the construction of new facilities were estimated to cause household user charges to increase by approximately \$2.00 to \$2.50 per month.

ΧV

The plan revealed that space limitations at the Lynnwood treatment plant site preclude certain secondary treatment alternatives, such as aeration ponds and trickling filter. Sludge processing alternatives were also reduced by space availability. However, the plan demonstrates that the technology exists to achieve secondary treatment at the present site, apparently without a significant impact on costs.

XVI

In 1979, the City applied to the Environmental Protection Agency (EPA) for a Section 301(h) waiver.

# XVII

By 1980, it had become apparent that Lynnwood's sewage treatment plant was severely overloaded and failing to meet even expected primary treatment levels. In October of that year, Department of Ecology issued an enforcement order to the City forbidding further

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extensions to its sewer system until the treatment plant was upgraded sufficiently to meet primary treatment objectives. This had the effect of qualifying the City for state grant assistance for an interim upgrade project.

XVIII

On October 17, 1983, the EPA wrote to the City of Lynnwood indicating that they (EPA) needed additional information to complete the evaluation of the City's waiver application.

XIX

In April of 1984, DOE published a public document entitled, "State of Washington Policy and strategy for Municipal Wastewater Management" (Document WDOE 84-4). This publication announced the agency's approach to the objective of upgrading municipal treatment works in an age in which grant funds for most projects will either be limited or non-existent.

Under the heading "policy" the department stated:

Responsibility for achieving compliance by the earliest possible date rests with the municipality. WDOE will provide financial and technical assistance to the extent possible. However, lack of such assistance does not excuse the municipality from compliance. . . .

Compliance means achieving secondary treatment or greater, even though there is a marine waiver provision in the federal Clean Water Act [301(h)]. From the state persective, marine waivers authorize an interim level of treatment on the way to eventual compliance with all known available and reasonable methods of treatment (which has as its eventual end-point, secondary treatment)...

The DOE, thus, enunciated a policy whereby its decision to concur or not to concur in marine waiver cases depends on the level of preparedness of a community to undertake a secondary treatment project. Timing was made a critical factor.

XX

On April 16, 1984, EPA wrote to DOE requesting that it immediately review all remaining 301(h) applications in the state and asking for the state's determination on them a soon as possible.

DOE put a task force to work on a crash basis to comply with this directive.

IXX

On July 20, 1984, DOE wrote to the City and advised of its refusal to concur in the waiver application. The agency said that it could not provide a determination that the proposed discharge will comply with applicable provisions of state law."

The letter stated:

This conclusion is based on an evalution of available information and current conditions in light of statutory requirements, including the provisions of RCW 90.52.040, which requires wastes to be provided with "all known, available and reasonable methods of treatment" prior to discharge, "regardless of the quality of the water of the state to which wastes are discharged." The department has determined that secondary treatment is "known and available," and is normally "reasonable" unless compelling evidence to the contrary is presented.

Among the criteria considered in determining "reasonable methods of treatment" were (1) the status of planning needed to proceed to secondary treatment, (2) environmental/siting constraints, and (3) economic factors. These criteria were evaluated using the city's 1980 facility plan.

#### IIXX

On August 26, 1984, the City, feeling aggrieved by this decision, appealed to this Board.

#### IIIXX

In October of 1984, the City of Lynnwood completed a \$7.3 million upgrading and expansion of their primary treatment facility. Half of this was paid for by a state grant, the other half from local funds, most of which were raised by selling revenue bonds. The improvements consisted of a new headworks facility, three new primary clarifiers, a chlorine contact tank, installation of a diffuser on the outfall line, and the upgrading of the sludge handling process and operations facilities.

The expanded treatment facilities are designed for an average annual daily flow of 4.5 MGD, and a peak flow of 11.6 MGD. These design flow rates are changes from the original 301(h) application, submitted in 1979, which proposed a 4.0 MGD average annual daily flow facility for the improved discharge.

The change in the proposed treatment facility capacity from 4.0 to 4.5 MGD was required by the Washington State Department of Ecology to meet the standard design life of 10 years for expansion projects.

Continued growth will require a capacity for average annual daily flow of 5.5 MGD by 1993, whether or not secondary treatment is constructed.

### VIXX

In November of 1984, the City responded to EPA's request fo Final Findings of Fact, Conclusions of Law & Order PCHB No. 84-206

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additional information by submitting two volumes entitled \*301(h) secondary treatment waiver update\* developed by the same engineering firm which did the facility plan.

### VXX

The first Department of Ecology criterion "status of planning needed to proceed to secondary treatment" is not an issue in this case. Since NPDES permits are for a term of five years, the Department of Ecology conceives that planning is far enough along if secondary treatment can be designed and constructed within five years. Several of the City's witnesses acknowledged that Lynnwood is ready now to proceed to secondary treatment from the planning perspective.

# IVXX

The second Department of Ecology criterion, \*environmental/siting constraints\* is an issue in this case.

There was no evidence that locating the secondary plant at the present site would violate any limitations relating the land use or any substantive environmental restrictions. However, the topography does present problems.

The existing treatment plant site is located on approximately 2.7 acres of land, severely restricted on the north, south and east by steep hillsides. The west side of the plant site is bordered by the Burlington-Northern Railroad and Puget Sound. The existing plant is constructed on the westerly portion of the floor of a narrow ravine. The narrow ravine bottom, steep side slopes and surrounding

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single-family residential development are physical realities which must be considered in designing the project.

The City contended that specific problems with this site should make secondary treatment unreasonable at this site. They testified that slide conditions, noise, odor from the sludge and land constraints all increased the likelihood of environmental degradation at the site. We, however, find that despite restricted citing conditions, it is possible to construct secondary treatment at the Lynnwood site without significant degredation of the environment.

The proposed secondary wastewater facility would occupy an area of less than six-tenths of an acre of the site. The design and construction will include architectural and landscaping considerations The ABF process recommended will to harmonize with the surroundings. bio-filtration towers and a sludge handling, control use operations building which should be, to a degree, screened off by natural features. Except for these, no structures will exceed one story.

Recent drainage and stabilization work has much reduced the danger of slides. Consideration of sound transference and abatement will be included in functional requirements. Sludge incineration techniques can effectively control odors.

Thus, the suggested environmental problems are speculative. None appears to be without a manageable engineering solution.

#### IIVXX

The third criterion "economic factors" is the major focus of Final Findings of Fact, Conclusions of Law & Order

dispute.

Though some grant money might be made available, DOE's analysis of economic reasonableness assumed the non-availability of any such funds and looked at the project on the basis of 100 percent local financing.

Water quality impacts were not considered in DOE's assessment of economic reasonableness. The presupposition was that the benefits side of the ledger had already been taken care of as a matter of legislative policy. Attention was given solely to the cost side.

The Department did no independent study. It relied on data furnished by the City, on information in its own files, and on formulae from EPA publications. DOE took the cost figures from the 1977 Lynnwood facility plan and attempted to update the cost of the project to 1984 dollars. The result was a construction cost estimate of \$15,035,531. A separate, somewhat lower estimate of the capital costs was derived from EPA's handbook, "Construction Costs for Municipal Wastewater Treatment Systems: 1973-1978."

From the updated cost figures DOE estimated the monthly residential use charges which would be needed to pay for the project. These charges were compared with charges actually being paid in selected cities in the state, as well as with a figure calculated by use of a formula used by EPA nationally to indicate what projects are "high cost" projects for the purposes of grant funding.

Using these approaches, DOE decided that Lynnwood's project was not unreasonably expensive to build at this time.

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# XXVIII

The City hired consultants to evaluate DOE's analysis and to prepare a financial forecast and rate impact analysis. The starting point for this work was an escalation of the construction cost numbers from the 1977 facilities plan to June 1984.

The result was an estimated construction cost for 5.5 secondary plant of about \$20 million. This includes clarifier and outfall costs not included in the 1977 facility plan, and also about \$400.000 in additional expense for slide protection owing peculiarities of the site. Except for the last mentioned item, the increase over 1977 costs is not directly attributable to local conditions at Lynnwood's site.

## XXIX

Residential users in Lynnwood are currently paying \$6.90 per month in sewer charges. Even without this secondary treatment project some rate increases can be anticipated.

#### XXX

Both the Department of Ecology and the City estimated the rate impact of the project. Department of Ecology estimated the monthly residential rate to be \$18.80 based on its update to 1984 of secondary treatment construction costs alone, and assuming 7.8% interest on The City's experts projected user rates based on revenue bonds. Lynnwood's entire sewage system capital improvement plan and included additional sums for the costs of borrowing and for fees for engineering, legal service and administration. The City used 10.5%

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interest on revenue bonds. Discounting the City's highest projected rate to 1984, the resulting figure is \$39.20 per month.

All of these rate projections are take-offs from preliminary cost estimates. Because of this, all of the rate figures derived must be seen, at best, as rough estimates.

### IXXX

Applied to Lynnwood, the EPA "high cost" formula in 1984 dollars yielded a hypothetical user charge of \$37.47 a month. This formula, which involves multiplying the median household income by a fixed factor is used as a national guideline in connection with grant decisions. It provides a general indication of when a project is in a cost range where alternative methods of accomplishing treatment objectives should be looked at.

The City's projections showed a widening gap over time between the EPA "high cost" figure and the user rates for Lynnwood. But the former was increased using only a 4% annual inflation figure, while the latter were the product of an assumed 6% inflation rate. Using 6% for both, the figures would remain close.

#### IIXXX

In its evaluation, DOE referred to an internal memorandum dated September 27, 1983, which showed average residential sewer user rates for a dozen Washington cities as exceeding \$20 per month (e.g., Bremerton, Port Orchard.) The memorandum showed one entity, Pierce County, with charges totaling \$40 per month.

No attempt was made to compare Lynnwood with the various entities Final Findings of Fact, Conclusions of Law & Order PCHB No. 84-206

listed in terms of system type or size, user population served or municipal financial condition.

However, Department of Ecology's witnesses testified that well over two hundred publicly owned treatment plants in Washington have gone to secondary treatment already and that only about 25 dischargers—all on marine waters—remain at primnary levels.

of those applying to the agency for waivers, only two have been granted on economic grounds, and those involved situations where projected user costs were dramatically in excess of the EPA "high cost" formula and of rates paid by other users in the state. In Department of Ecology's view, requiring Lynnwood to go to secondary treatment would ask no more of it than most other communities have been asked to do.

Even on the basis of the cost and rate estimates furnished by the City's experts, the agency stated it could find no compelling reason to make an exception for Lynnwood.

#### IIIXXX

utilizing the Activated The secondary treatment process Bio-Filtration (ABF) process was selected because it will satisfy all the requirements of the existing sewer system and the regulatory The space requirements, energy needs, and operation and maintenance are less than the other treatment processes tasks The Facility Plan lists the total estimated cost, the considered. yearly operation and maintenance cost, and the total annual cost for each of the three treatment processes considered in this section. Αn

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analysis of annual costs presented indicates that the most cost effective process for secondary treatment at the existing treatment plant site is that of utilizing the Activated Bio-Filtration Process.

#### VIXXX

Secondary treatment is both known and available. There is no argument to the contrary. The technology has been in existence for many years. It is in common use by industries and municipalities across the nation. The expertise of several of the City's consultants is in the design of various types of systems which will provide this level of treatment. The Lynnwood facility plan evidences that the technology is neither experimental nor exotic.

# VXXX

Nothing in the record demonstrates that as a generic category, secondary treatment involves prohibitive costs.

Moreover, the particular system type proposed for the City does not appear to be an unusually expensive variety of secondary treatment. In the facility plan the costs of alternative secondary treatment systems are compared. The proposed system (ABF) compares favorably in cost with the other possibilities.

#### IVXXX

Some evidence was presented by the City showing site-specific factors which will add construction costs to the secondary treatment plant proposed for Lynnwood. However, these extra costs were not shown to render the expense of secondary treatment at Lynnwood significantly beyond the normal cost spectrum. Nothing about the salt

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water location was shown to make achieving secondary treatment more costly than achieving the same pollutant reduction at a fresh water location.

### IIVXXX

The potential dramatic effect of the secondary treatment project on user charges is not attributable to the imposition of a technology which is unusual or hard to get, or which has been shown from a comparative standpoint to be extraordinarily expensive. The effect is primarily attributable to the assumption, by all concerned, that no grant funds will be available to reduce the amount of cost born locally.

#### IIIVXXX

DOE's experience is that cost estimates for projects initially planned (as here) assuming 90 percent grant funding are signficantly higher than actual costs incurred if only 50 percent or less grant funding is made available.

### XXXXX

The City did not prove that it would be beyond its capability to finance the proposed secondary treatment project at this time.

#### XXXX

Evidence concerning the water quality impacts of discharges from both the City's present sewage treatment plant and the proposed upgraded facility was the subject of a motion in limine offered at the hearing. We received the evidence subject to a later ruling on its admissibility.

We have admitted this testimony for the limited purpose of determining that existing water quality of the receiving waters is better than the limits described by applicable water quality standards, and that secondary treatment would result in additional pollutant removal. Beyond this, because of the conclusion set forth below in Conclusion of Law IX, the Board did not consider any of the water quality evidence presented in reaching its decision.

# IXXXX

Any Conclusion of Law which is deemed a Finding of Fact is hereby adopted as such.

From these Findings of Fact, the Board comes to these
CONCLUSIONS OF LAW

I

We conclude that the DOE's denial of concurrence is an appealable order under chapter 43.21B RCW giving rise to a contested case.

Normally the level of treatment an entity must meet would be imposed through effluent limits in a discharge permit, issued by the state in satisfaction of the requirements of both federal and state law. However, the 301(h) "waiver" process compels a variation in this routine. The "waiver" process involves an application for a federally issued permit to allow a relaxation in the mandate for secondary treatment otherwise imposed by federal law. 33 USC 1311(b)(1)(B), 1311(h). But before federal evaluation of the application, the state must decide that such federal issuance would not conflict with applicable state law. 40 CFR 125.59(b)(3).

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If, as here, the state determines that there is a conflict, the federal "waiver" process is aborted, and the state decision, in effect, returns the applicant to the normal discharge permit track. In so doing, the state decision of necessity answers a substantive state law question. The matter determined is that state law requires at least secondary treatment for discharges from the source in question.

Such a decision is, we believe, a final order which this Board can review. The Board has jurisdiction over these parties and these issues.

II

This appeal involves state law only. No federal law issues are raised. There is one encompassing question: Can the City of Lynnwood under the law of Washington be permitted to continue discharging wastes provided with less than secondary treatment?

This requires interpretation of the statutory formulation "all known available and reasonable methods of treatment" (hereafter called, the State Standard). No one argues that secondary treatment is either unknown or unavailable. The dispute is over its reasonableness.

III

The broad question of the case logically subdivides into three subissues: (1) May water quality be considered in determining what the State Standard requires? (2) Is the reasonableness of a treatment method affected, as a matter of law, by the availability of federal or

state grant funds to help pay for its installation? (3) If the answer to subissues (1) and (2) is "no," is it reasonable to require at least secondary treatment for Lynnwood's sewerage.?

IV

Consideration of subissue (1) -- the water quality question -- requires an analysis of the history of the State Water Pollution Control Act (hereafter called, the State Act), chapter 90.48 RCW, and two related enactments: the Pollution Disclosure Act of 1971, chapter 90.52 RCW; and the Water Resources Act of 1971, chapter 90.54 RCW.

Such an analysis is set forth in our opinion in <u>Bellingham v.</u>

<u>Department of Ecology</u> and we adopt that reasoning and interpretation here.

Two state measures adopted in 1971, a year before the overhaul of the federal water pollution law, are at the heart of this case. These are now codified as RCW 90.52.040 and RCW 90.54.020(3)(b), respectively.

The first reads:

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In the administration of the provisions of chapter 90.48 RCW, the director of the department of ecology shall, regardless of the quality of the water of the state to which wastes are discharged or proposed for discharge, and regardless of the minimum water quality standards established by the director for said waters, require wastes to be provided with all known, available, and reasonable methods of treatment prior to their discharge or entry into waters of the state. RCW 90.52.040.

The second reads:

Waters of the state shall be of high quality. Regardless of the quality of the waters of the state, all wastes and other materials and substances proposed for entry into said waters shall be provided with all known, available and reasonable methods of treatment prior to entry. Notwithstanding standards of quality established for the waters would violated, wastes and other materials and substances shall not be allowed to enter such waters reduce the existing quality thereof, which will except in those situations where it is clear that overriding considerations of the public interest would be served. RCW 90.54.020(3)(b).

From this plain language, the apparent purpose was to establish unambiguously a technology-based system in this state. We hold that the Legislature did so, and subsequent amendments have not changed this basic feature of state law.

VI

The state permit system was extended to municipalities or public corporations operating sewer systems in 1972. Section 1, chapter 140, Laws of 1972 ex.sess. In adding these entities to the system, the Legislature stated:

.this section is intended to extend the permit system of RCW 90.48.160 to counties and municipal or public corporations and the provisions of . . RCW the permit applicable to 90.52.040 shall be RCW 90.48.162. o£ this section. requirements (Emphasis added.)

Thus, all municipalities were explicitely placed within the reach of the terms of RCW 90.52.040 as of 1972.

VII

In 1973, the Legislature amended a state law provision granting general power to participate in federal programs and provided a Final Findings of Fact.

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detailed grant of power to issue permits satisfying requirements of the new federal NPDES system. Section 1, chapter 155, Laws of 1973; RCW 90.48.260. The amendment stated, in part:

...the powers granted herein include...[c]omplete authority to establish and administer a comprehensive state point source waste discharge or pollution discharge elimination program which will enable the department to qualify for full participation in any national waste discharge or pollution discharge elimination permit system...

To the extent that this amendment may have added to existing substantive law, it must have firmly established the State Standard as a technology-based treatment provision. At the time such was the exclusive nature of the federal standards, which as to municipalities, called expressly for effluent limitations based upon secondary treatment. Section 301(b)(1)(B); 33 USC 1311(b)(1)(B).

Another section of the 1973 amendments, codified at RCW 90.48.262(1), drives the point home even more forcefully:

The permit program authorized under RCW 90.48.260(1) shall constitute a continuation of the established permit program of RCW 90.48.160 and other applicable sections within chapter 90.48 RCW. The appropriate modifications as authorized in this 1973 amendatory act are designed...to insure that the state permit program contains all required elements of and is compatible with the requirements of any national permit system.

Compatibility in 1973 meant that the state system had to demand the appropriate technology, notwithstanding the absence of identified water quality problems.

#### IIIV

The "marine waiver" provisions of Section 301(h) of the federal Final Findings of Fact, Conclusions of Law & Order PCHB No. 84-206 24

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statute, adopted four years later in 1977 [33 USC 1311(h)], have no state law analogue. As noted in 1973, the state law was consciously altered to insure that it was at least as stringent as the 1972 version of the federal statute. However, the State Act has never subsequently been amended to mirror the 1977 weakening of the federal scheme for marine discharges by municipalities.

Section 510 of the Federal Act, 33 USC 1370, authorizes states to enforce standards which are more stringent than those imposed federally. The federal scheme does not require states to weaken their standards when the federal government weakens its standards and our Legislature has not done so.

RCW 90.48.260 has been amended twice since 1973. In 1979 the words "as amended" were inserted after "Federal Water Pollution Control Act. \* Section 1, chapter 267, Laws of 1979 ex.sess. In 1983. the term "Federal Water Pollution Control Act" was replaced Section 1, chapter 270, Laws of 1983. "federal clean water act." The most that can be deduced from these simple changes is that Legislature intended the state to pick up the authority to comply with any new federal requirements which may have been added by amendments to the federal act. But, nothing appears in these terse changes which, in any way, indicates a conscious legislative decision to retreat from the technology-based approach to treatment. distinguishes between the treatment of discharges to salt water and other discharges. Nothing suggests a separate standard to be applied to municipalities as opposed to commercial and industrial operations.

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Section 301(h) does not impose new requirements for states administering the federal act. It creates an optional procedure which states may choose to reflect in state law or not. The State of Washington has not chosen to adopt a "marine waiver" exception to the technology-based State Standard.

ΙX

We, therefore, conclude that the State Standard as expressed in currently effective legislation calls for the imposition of methods of treatment based on technology and that, in the instant case, water quality considerations are irrelevant to the selection of the technology to be imposed.

We need not decide if water quality considerations might relevant under state law where the discharge is to severely degraded waters or where existing water quality or water quality standards would be exceeded absent extraordinary treatment efforts. existing quality is high and the imposition of secondary treatment pollutant would result 1 n additional removal. Under such circumstances, water quality considerations have no place in the technology selection process.

Х

We reject the notion that RCW 90.52.040 rules considerations of existing water quality, but not of the effects of proposed discharges in the process of technology selection. To look at water quality effects without looking at existing water quality would be virtually impossible. Moreover, such a reading would, in

practice, make water quality the driving force in choosing the levels of treatment to be achieved. This is precisely the opposite of what the legislative evolution of the State Standard points to. It is an interpretation undercutting the whole concept of a technology-based system and would render illusory the attempts to make state law conform to the 1972 federal act. We decline to adopt it.

XΙ

There is no conflict between RCW 90.52.040 and RCW 90.54.020(3)(b) (quoted in full in Conclusion V). Both passed in the same session and should be construed as in the same spirit and actuated by the same policy. Daviscourt v. Peistrup, 40 Wn. App. 433, \_\_\_\_\_ P.2d \_\_\_\_\_ (1985).

RCW 90.54.020(3)(b) supplements the State Standard with a non-degradation policy which arguably could require more stringent technology than ordinarily necessitated by the Standard. Where, as here, degradation is not threatened, the subsection does not make water quality relevant to the choice of technological alternatives.

XII

The State Act requires that a permit be obtained before wastes are discharged into the waters of the state. RCW 90.48.160, 90.48.162. The waters of Browns Bay are waters of the state. RCW 90.48.020.

RCW 90.48.180 provides, in pertinent part:

The [DOE] shall issue a permit unless it finds that the disposal of waste material as proposed in the application will pollute the waters of the state in

violation of the public policy declared in RCW 90.48.010. The [DOE] shall have authority to specify conditions necessary to avoid such pollution in each permit under which waste material may be disposed of by the permittee:

Water quality standards represent the determination of DOE as to what constitutes pollution. Centralia v. DOE, PCHB No. 84-287 (1985); RCW 90.48.040, 90.48.035. Thus, no waste discharge permit may be issued at all if the disposal of wastes as proposed would violate water quality standards.

However, this does not mean that water quality considerations became relevant to the level of treatment to be imposed when both existing and predicted water quality is better than the polluted level described by water quality standards. The imposition of a technology-based treatment standard under these circumstances is wholly consistent with RCW 90.48.180.

Moreover, under the statutory scheme as a whole, the power to specify conditions is not limited to those "necessary to avoid...pollution." Conditions which will do much better than that are also authorized. Were this not so, RCW 90.52.040 and RCW 90.54.02093)(b) would be meaningless.

#### XIII

The conclusion we reach on the water quality issue, as a matter of state law, 18 consistent with decisions concerning requirements of the federal act. Except where water quality considerations may have been made expressly applicable by the statute, they have been held an improper subject of consideration in analyzing

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requests to reduce the level of treatment required. See Crown Simpson Pulp Co. v. Castle, 642 F.2d 323 (9th Cir. 1981); Appalachian Power v. EPA, 671 F.2d 801 (4th Cir. 1982).

VIX

This brings us to subissue (2)--the relevance of grant availability. As with water quality, the non-availability of grant assistance has been held irrelevant to the substantive duty to meet specified levels of treatment under the federal act, except where explicitly made applicable in the statute. State Water Control Board v. Train, 559 F.2d 921 (4th cir. 1977).

We adopt the same analytical approach to this question as a matter of state law. Nothing in chapter 90.48 RCW or in any related statutes suggests that the duty to provide the appropriate technology is in any way dependent upon whether federal or state grant assistance will be provided. Nothing suggests that the reasonableness of a particular level of treatment is connected with whether the costs of a project are spread to the taxpayers of the nation or of the state rather than paid solely by the local citizens directly served.

Therefore, we conclude that legally there is no linkage in law between grant fund availability and the level of treatment which may be required. This is the interpretation adopted by DOE in their 1984 "State of Washington Policy and Strategy for Municipal Wastewater Management." As the construction of the responsible agency, this view is given great weight. Pedersen v. Department of Transportation, 25 Wn.App. 781, 6711 P.2d 1293 (1980); Weyerhaeuser v. DOE, 86 Wn.2d 310,

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(3)--the question of Finally, to subissue general We. turn Since neither water quality nor the availability of reasonableness. grant funds may be considered ın the selection οf treatment technology, what constitutes reasonableness under the State Standard is a limited inquiry.

In 1983 DOE posed the following question to the Attorney General:

Under state law may a municipality discharge wastes from its sewerage system into Puget Sound or other marine waters, without providing secondary treatment?

The answer is set forth in AGO 1983 No. 23, a formal opinion construing the State Standard. The core of the response is as follows:

The precise level of treatment required by those general standards involves, primarily, engineering determinations; i.e., as to what treatment methods are "known," what treatment methods are "available," and what treatment methods are "reasonable" respect to the particular installation in light of the factual circumstances surrounding it. these determinations a review must be conducted by the department of existing engineering technologies in order to enable it to decide which methods of treatment--including but not limited to \*secondary defined--are treatment\* as above suitable with respect to the waste situation involved in the particular case.

DOE's response was to make a generalized engineering determination, expressed in its municipal strategy document, that secondary treatment is ultimately required of all municipalities by the State Standard. However, it provided for case-by-case evaluation of each municipal discharge to determine if the generalized determination is appropriate

for that source at the time the question is asked. Thus, in its denial of concurrence here, DOE stated that secondary treatment is "normally 'reasonable' unless compelling evidence to the contrary is presented."

This approach essentially establishes a generic treatment level as appropriate for the entire class of municipal dischargers and, then, allows for a kind of variance from this level on a showing of "compelling evidence." This decisional model is similar to the approach taken by EPA in requiring a showing of "fundamentally different" factors affecting an industrial discharge before allowing it to vary from treatment requirements set on a category-wise basis.

See EPA v. National Crushed Stone Association, 449 U.S. 64, 66 L.Ed.

We conclude that, in this case, the technique of analysis used by DOE is consistent with the State Act.

XVI

As to factors bearing on reasonableness, DOE considered three; (1) planning status, (2) environmental or siting constraints, and (3) economics. Except for those matters we have concluded are irrelevant; i.e., water quality and grant availability, there is no contention that DOE failed to evaluate any factors it was legally obliged to consider. Thus, we limit our inquiry to whether the agency rightly decided the reasonableness question in light of the factors it did consider.

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which narrow the range of choices for the secondary treatment plant at

Evidence was presented by the City showing siting constraints

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Lynnwood and present some risk of environmental degradation. these problems were not shown to be insurmountable and these risks were not shown to be significant. We conclude that the requirement for secondary treatment is not unreasonable in light of environmental or siting problems. DOE's reasonableness determination, thus, rises or falls on the "economics" consideration.

#### IIIVX

The economic aspect of the reasonableness criterion of the State Standard is, we conclude, defined by two propositions: (1) whether secondary treatment for Lynnwood would involve significantly greater costs than for others obliged to obtain the same levels of treatment, and (2) whether secondary treatment is within the economic ability of the source to meet the costs of treatment.

EPA's refusal to consider the second of these propositions in industrial variances was upheld in National Crushed Stone Association, But, underlying this conclusion was the realization that a supra. single plant unable to come up to industry-wide standards can simply luxury municipal sewage treatment operations. This 1 S a cease The sewage must go some place. facilities do not enjoy. in interpreting the state law requirement for reasonableness as to municipalities, we think it is appropriate to include the "ability to pay" factor. Cf. Weyerhaeuser v. Southwest Air Pollution Control

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Authority, 91 Wn.2d 77, 586 P.2d 1163 (1978).

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Under the evidence, it is clear that building a secondary treatment facility would be costly for the City and for the citizens served. However, neither significantly greater comparative project costs nor costs beyond the City's ability to bear were shown on the record made to this Board. Borrowing from federal terminology there is nothing "fundamentally different" about the Lynnwood project.

XIX

Under the facts of this case, secondary treatment was not shown to fall outside the reasonableness criterion of the State Standard.

Therefore, we hold that DOE was correct in refusing to concur in the City's marine waiver application. Such a <u>waiver would conflict</u> with applicable provisions of state law.

XX

In reaching our conclusion in this case we disclaim any intention of rendering personal views on what the state law ought to be in relation to marine waivers. Our opinion is limited to setting forth what we believe the law of Washington is on the subject. Whether the law should be retained in its present form or changed is a broad question of policy, properly addressed to the Legislature.

XXI

Any Finding of Fact which is deemed a Conclusion of Law is hereby adopted as such.

From these Conclusions of Law the Board enters the following

ORDER The non-concurrence decision of DOE announced in its letter to the City dated July 20, 1984, is affirmed. DONE this 4th day of October, 1985. POLLUTION CONTROL HEARINGS BOARD (See Concurrent Decision)
LAWRENCE J. FAULK, Chairman S 

WICK DUFFORD, Lawyer Member

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LAWRENCE J. FAULK - CONCURRING OPINION

I write separately because even though I reluctantly concur with the result reached by the majority, I wish to emphasize some points not discussed in that opinion.

The result reached by this Board is unfortunate but is required by the law of the state of Washington.

# I WATER QUALITY

RCW 90.52.040 reads:

In the administration of the provisions of chapter 90.48 RCW, the director of the department of ecology shall, regardless of the quality of the water of the state to which wastes are discharged or proposed for discharge, and regardless of the minimum water quality standards established by the director for said waters, require wastes to be provided with all known, available, and reasonable methods of treatment prior to their discharge or entry into waters of the state. (Emphasis added).

This section of the law says clearly that whether the receiving water quality is excellent or very poor makes no difference as to what treatment method is required.

Lynnwood's water has been analyzed by both state and city experts. The result is that Lynnwood's water quality at its sewerage discharge point was of the highest quality according to state standards and that water quality and marine life would not be adversely affected should the Lynnwood treatment plant continue to utilize upgraded primary treatment and not secondary treatment. (Heinle, Roth, Crecelius-Jahola testimony.)

Clearly, in my view, if this Board could have taken into account the quality of the receiving water, secondary treatment would not have been required for the City of Lynnwood.

The federal Clear Water Act provides for a walver of the secondary

The federal Clean Water Act provides for a waiver of the secondary treatment requirement for publicly owned treatment plants imposed by subsection 301(b)(l)(B) of the Act where such plants discharge to marine waters.

Federal Clean Water Act 301(h) reads:

- (h) The Administrator, with the concurrence of the State, may issue a permit under section 402 which modifies the requirements of subsection (b)(1)(B) of this section with respect to the discharge of any pollutant in an existing discharge from a publicly owned treatment works into marine waters, if the applicant demonstrates to the satisfaction of the Administrator that--
  - (1) there is an applicable water quality standard specific to the pollutant for which the modification is requested, which has been identified under section 304(a)(6) of this Act;
  - (2) such modified requirements will not interfere with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife, and allows recreational activities, in and on the water;
  - (3) the applicant has established a system for monitoring the impact of such discharge on a representative sample of aquatic biota, to the extent practicable;
  - (4) such modified requirements will not result in any additional requirements on any other point or nonpoint source;
  - (5) all applicable pretreatment requirements for sources introducing waste into such treatment works will be enforced;

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- (6) to the extent practicable, the applicant has established a schedule of activities designed to eliminate the entrance of toxic pollutants from nonindustrial sources into such treatment works:
- (7) there will be no new or substantially increased discharges from the point source of the pollutant to which the modification applies above that volume of discharge specified in the permit.

For the purposes of this subsection the phrase "the discharge of any pollutant into marine waters refers to a discharge into deep waters of the territorial sea or the waters of the contiquous zone, or into saline estuarine waters where there is strong tidal movement and other hydrological and geological characteristics which the Administrator determines necessary to allow compliance with paragraph (2) of this subsection, and section 101(a)(2) of this Act. A municipality which applies secondary treatment shall be eligible to receive a permit pursuant to this subsection which modifies the requirements of subsection (b)(1)(B) of this section with respect to the discharge of any pollutant from any treatment works owned by such municipality into marine waters. No permit issued under this subsection shall authorize the discharge of sewage sludge into marine waters. (33 USC 1311(h).

The federal law is clearly a water quality based standard, while the state law is a technology based standard. Until the legislature resolves this matter, this conflict will continue to exist with the attendant results that one sees in this case.

Those results include requiring the City of Lynnwood to issue \$35,923,000 of revenue bonds (Exhibit A-21) and pay an estimated monthly residential sewage charge of \$55.61 in 1990, to install secondary treatment. (Testimony of City expert witness John Maxwell and Bill Clouter.) This figure exceeds the rate for a \*high cost

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project" under federal guidelines which is \$34.47 per month according to DOE witness Chris Haynes. Yet the testimony before this Board, by the City, is that there is no adverse effect on water quality from the City's discharge without secondary treatment. The Department of Ecology did not consider the water quality of Brown's Bay.

# II REASONABLENESS

The Department of Ecology has chosen to define "reasonable" in terms of three criteria: (1) the status of planning needed to proceed to secondary treatment; (2) environmental siting constraints; and (3) economic factors.

The City testified that site specific constraints exist at the site of the treatment plant, slide conditions, noise, odor and land constraints all increase the likelihood of environmental degradation at the site. Evidence was presented that indicated there would be increased risk of catastrophic damage to the Lynnwood plant site. The site has suffered substantial slides in the past. One such slide left the transmission line of all sewage in the plant dangling in the air for some 50 feet. (Wims' testimony) testimony was that surrounding property owners have complained and filed claims against the City for damages from sliding which occurred during the latest construction effort.

While I do not believe these problems are insurmountable, I do think it will make secondary treatment must more expensive than otherwise would be necessary at another site.

The City's appeal focused upon the siting constraints and economic CONCURRING - FAULK PCHB No. 84-206 4

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criterion. The Department of Ecology's economic criterion include a variety of concerns, but the basic one was cost. What will the cost of building a secondary treatment plant be? What will the cost of operating a secondary treatment plant be? How will those costs affect the City's sewer rate structure?

It is apparent from the record in this case that the weight of economic testimony is on the side of Lynnwood. This is because it was supported by the testimony of qualified experts as opposed to the Department's witnesses. DOE's witnesses clearly did not have the proper expertise to analyze the subject of user rates, investment banking practices or economic forecasting.

For instance, DOE justified its user-rate analysis for the City of Lynnwood on the basis of the administrative convenience of simply updating the 1977 facilities plan estimates whereas the City's user-rate analysis was based on more specific estimating techniques, which were supported by professional expertise including that of an investment banker and financial analyst with special expertise in feasibility and financing of sewage treatment projects.

Further, despite the fact that EPA's financial guidelines provide for states to examine the impact of sewage treatment projects to low income users by comparing project costs with the ability of those persons in the bottom quartile of income to pay, DOE did not perform that analysis.

Finally, if DOE is to make judgments like this then they need to be able to correctly estimate the costs of projects such as this by CONCURRING - FAULK PCHB No. 84-206

including the following categories of cost; engineering, legal, financial, contingency, overhead, interim interest expense, revenue bond reserve, debt service, revenue bond coverage and sales tax.

# III CONCLUSION

Secondary treatment is economically excessive and could cause adverse environmental impacts (sludge disposal) without corresponding benefits. Either of these problems is, in and of itself, sufficient proof of the undue burden of secondary treatment for Lynnwood; combined with the huge economic price tag of secondary treatment and the resulting adverse environmental impacts without corresponding benefits to water quality, beneficial uses and aquatic life, causes a waiver denial to violate any standard of fairness.

The legislature will be disappointed, I think, to learn that in enacting the water pollution laws, it was allowing a government agency to force secondary treatment on communities regardless of the effect on the quality of the marine receiving waters.

The point is that if primary treatment has no adverse effect on the marine receiving waters as is the case in Lynnwood, then it should be allowed to be discharged and the municipality should not be forced to pay for secondary treatment.

I think the legislature's disappointment will continue unabated when they discover that state law has removed the authority from this Board to make that judgment, on a case-by-case basis.

For these reasons, I believe the law should be changed to allow the quality of the receiving waters to be considered in determining whether a municipal treatment plant discharging to marine waters needs to install secondary treatment.

DATED this 4th day of October, 1985.

LAWRENCE J FAUDK, Chairman